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09/700,937	11/21/2000	Takio Ejima	KAM1-BN11	4522

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EXAMINER
LEE, EDMUND H

ART UNIT	PAPER NUMBER
1732	12

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

MK-12

Office Action Summary	Application No.	Applicant(s)	
	09/700,937	EJIMA ET AL.	
	Examiner	Art Unit	
	EDMUND H LEE	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18,20-32 and 57-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18, 20-32, 57-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The corrected or substitute drawings were received on 2/26/03. These drawings are acceptable.

2. Claims 58-65 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The test or scale used to measure hardness is not found in the instant specification. Thus, the hardness values are without a point of reference. Applicant is cautioned against the addition of new matter into the instant specification.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Robson (USPN 3624691). Robson teaches the claimed process including insert molding second cores/bracing members on each of flexible first cores/wires so as to be spaced from each other using a skeleton forming material of a rigid synthetic resin, to thereby form a skeleton member including the first and second cores connected to each other (col 2, lns 60-75; figs 1-5); insert molding a skin member on the skeleton member using a skin forming material (such as a vinyl like pvc) of a soft synthetic resin whereby the

rigid resin (such as polypropylene) and the soft resin are compatibly welded together (col 3, lns 1-37; figs 1-5).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 20-23, 25-26, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robson (USPN 3624691). The above teachings of Robson are incorporated hereinafter. Robson also teaches forming a doll having a trunk, arms, and legs in which the skeleton member is embedded (figs 1-5); forming fixing shafts which extend from second cores to the surfaces of the doll (col 2, ln 60-col 3, ln 32; figs 1-5); arranging the skeleton member in a mold for molding the skin member, fixing the fixing shafts on the mating surfaces of the mold to stabilize the skeleton member and injecting the soft synthetic resin into the mold (col 2, ln 60-col 3, ln 32; figs 1-5); removing portions of the fixing shafts projecting from the surface of the doll after molding (col 2, ln 60-col 3, ln 32; figs 1-5); and molding a foot skeleton section incorporated in each of the legs; forming second cores at a place facing a joint with small projections (col 2, ln 60-col 3, ln 32; figs 1-5). Robson does not teach using the claimed material for the skeleton and skin member; treating marks left on the surface of the doll due to the removal of the projecting portions of the fixing shafts; treating by melting the surface of the doll; directly abutting a rear surface of a distal end of each of the second cores

corresponding to the foot skeleton section against an inner surface of the molding spaces in the mold; arranging the fixing shafts at a site at which an injection pressure of the soft resin is unstable; treating the marks left due to the removal of the projected portions on the fixing shafts by hot air procedure; and using stainless steel or iron for the first cores. In regard to using the claimed material for the skeleton and skin member , such is a mere obvious matter of choice dependent on the material availability and the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, such materials are well-known in the molding art for their characteristics such as cost, strength, and flexibility. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed material in the process of Robson in order to produce a high quality doll. In regard to treating marks left on the surface of the doll due to the removal of the projecting portions of the fixing shafts, it is well-known in the molding art to finish a molded article in order to create a smooth article surface. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to treat/finish the surface of the doll roughened by the cutting of the fixing shafts in order to create a doll having a smooth surface. In regard to treating by melting the surface of the doll, such is a well-known method of finishing. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to finish the doll of Robson by melting in order to create a smooth and even doll surface. In regard to directly abutting a rear surface of a distal end of each of the second cores corresponding to the foot skeleton section against an inner surface of the molding

spaces in the mold, such is a mere obvious matter of choice dependent on mold design and the desired final product. Further, it is well-known in the molding art to securely position a preform with a mold in order to prevent movement of the preform during a subsequent molding step. See US Class 264, subclass 275. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to redesign the mold of Robson to securely hold the distal end of the foot of Robson in order to further prevent any movement of the skeleton during the insert molding of the skin. In regard to arranging the fixing shafts at a site at which an injection pressure of the soft resin is unstable, such is well-known in the molding art in order to ensure a high quality molded article. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the fixing shafts of Robson at the unstable sites in order to mold a high quality doll. In regard to treating the marks left due to the removal of the projected portions on the fixing shafts by hot air procedure, it is well-known in the molding art to melt thermoplastic by applying hot air. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to treat the marks of Robson by hot air in order to efficiently remove the marks. In regard to using stainless steel or iron for the first cores, such is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, wires of stainless steel or iron are well-known in the molding art for their durability. Thus, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to use either stainless steel or iron for the first core of Robson in order to create a durable doll.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robson (USPN 3624691) as applied to claim 21 and further in view of Dahl (USPN 3284947). The above teachings of Robson are incorporated hereinafter. Robson also teaches molding a skeleton member having first cores arranged at sites in the doll corresponding to joints and second cores arranged at sites in the doll corresponding to distal ends thereof and position between joints adjacent to each other (col 2, ln 60-col 3, ln 32; figs 1-5); and molding a trunk from two vertical first cores (col 2, ln 60-col 3, ln 32; figs 1-5). However, Robson does not teach using a metal for the first cores; molding a trunk from three first cores; and having the outer two of the three first cores inwardly curved with respect to each other. Dahl teaches molding a doll having metal first cores (figs 1-2A); and arranging three first cores in the trunk (figs 1-2A). Robson and Dahl are combinable because they are analogous with respect to molding dolls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use metal first cores and arrange three first cores in the trunk in process of Robson in order to create a more durable doll. In regard to arrangement the outer two first cores of the three first cores, such is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, such is well-known in the doll art in order to form a form a doll with a thin waist. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

redesign the trunk of the doll of Robson (modified) to have the outer two first cores inwardly curved in order to create a doll having a thin waist.

8. Claims 27-29 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robson (USPN 3624691). In regard to claim 27, Robson teaches the basic claimed process including molding an elastic doll having a trunk, arms, and legs in which a skeleton member is embedded (col 2, ln 60-col 3, ln 32; figs 1-5); providing cores made of rigid synthetic resin to constitute the skeleton member wherein fixing shafts are formed to extend from the cores to a surface of the doll (col 2, ln 60-col 3, ln 32; figs 1-5); arranging the skeleton member in a mold and fixing the fixing shafts on mating surfaces of the mold to stabilize the skeleton member (col 2, ln 60-col 3, ln 32; figs 1-5); injecting soft synthetic resin into the mold (col 2, ln 60-col 3, ln 32; figs 1-5); and removing portions of the fixing shafts projecting from the surface of the doll after molding. However, Robson does not teach treating marks left on the surface of the doll due to the removal of the projecting portions of the fixing shafts. Such is well-known in the molding art to finish a molded article in order to create a smooth article surface. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to treat/finish the surface of the doll roughened by the cutting of the fixing shafts in order to create a doll having a smooth surface. In regard to claims 28-29 and 31-32, Robson teaches forming the cores at a place facing a joint with small projections (col 2, ln 60-col 3, ln 32; figs 1-5). However, Robson does not teach treating by melting the surface of the doll; directly abutting a rear surface of a distal end of each of the second cores corresponding to the foot skeleton section against an inner surface

of the molding spaces in the mold; and arranging the fixing shafts at a site at which an injection pressure of the soft resin is unstable. In regard to treating by melting the surface of the doll, such is a well-known method of finishing. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to finish the doll of Robson by melting in order to create a smooth and even doll surface. In regard to directly abutting a rear surface of a distal end of each of the second cores corresponding to the foot skeleton section against an inner surface of the molding spaces in the mold, such is a mere obvious matter of choice dependent on mold design and the desired final product. Further, it is well-known in the molding art to securely position a preform with a mold in order to prevent movement of the preform during a subsequent molding step. See US Class 264, subclass 275. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to redesign the mold of Robson to securely hold the distal end of the foot of Robson in order to further prevent any movement of the skeleton during the insert molding of the skin. In regard to arranging the fixing shafts at a site at which an injection pressure of the soft resin is unstable, such is well-known in the molding art in order to ensure a high quality molded article. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the fixing shafts of Robson at the unstable sites in order to mold a high quality doll.

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robson (USPN 3624691) as applied to claim 27 and further in view of Dahl (USPN 3284947). The above teachings of Robson are incorporated hereinafter. Robson also teaches

molding a skeleton member having first cores arranged at sites in the doll corresponding to joints and second cores arranged at sites in the doll corresponding to distal ends thereof and position between joints adjacent to each other (col 2, ln 60-col 3, ln 32; figs 1-5); and molding a trunk from two vertical first cores (col 2, ln 60-col 3, ln 32; figs 1-5). However, Robson does not teach using a metal for the first cores; molding a trunk from three first cores; and having the outer two of the three first cores inwardly curved with respect to each other. Dahl teaches molding a doll having metal first cores (figs 1-2A); and arranging three first cores in the trunk (figs 1-2A). Robson and Dahl are combinable because they are analogous with respect to molding dolls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use metal first cores and arrange three first cores in the trunk in process of Robson in order to create a more durable doll. In regard to arrangement the outer two first cores of the three first cores, such is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, such is well-known in the doll art in order to form a form a doll with a thin waist. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to redesign the trunk of the doll of Robson (modified) to have the outer two first cores inwardly curved in order to create a doll having a thin waist.

Claims 58-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robson (USPN 3624691). In regard to claim 58, Robson teaches the basic claimed process including forming a metal frame (figs 3-5); covering the metal frame with a first synthetic

resin material having a hardness value to limit bending of the metal frame (col 2, lns 45-60); molding a plurality of rigid core sections at positions spaced along the metal frame while exposing the covered metal frame in positions corresponding to anatomical joints of the living creature (figs 3-5); and molding a second soft synthetic resin to surround the metal frame and the plurality of rigid core sections to simulate the tissue of the living creature (figs 3-5). However, Robson does not teach using a first resin with a hardness in the range of 25-35. The use of a specific material is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, such material is well-known in the molding art for its strength. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a material having the claimed hardness in the doll of Robson in order to ensure the durability and performance of the doll. In regard to claims 59-65, Robson using first and second resins that are compatible thermoplastic elastomers that can be welded together when contacted in a mold (col 2, ln 60-col 3, ln 35); using polypropylene for the rigid core sections (col 2, ln 60-col 3, ln 35); and using a polyolefin for the rigid core section and an elastomer for the second resin (col 2, ln 60-col 3, ln 35). However, Robson does not teach using a pair of substantially parallel portions extending from a bent intermediate section; using iron for the metal frame; holding the frame magnetically during the molding steps; using a styrene resin with a hardness in the range of 10-20; and using a styrene elastomer for the first resin. In regard to using a pair of substantially parallel portions extending from a bent intermediate section, such is well-

known in the doll art in order to strengthen the middle section of a doll. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reinforce or strengthen the middle section of the doll of Robson by using two parallel wires in the doll of Robson. In regard to using iron for the metal frame, such is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further iron wires are well-known in the molding art for its strength and availability. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use iron wires in the process of Robson in order to reduce material costs and to produce a durable doll. In regard to holding the frame magnetically during the molding steps, such is well-known in the molding art in order to effective prevent shifting of metallic preforms. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use magnets to prevent shifting of the wires of Robson in order to produce high quality dolls. In regard to using a styrene resin with a hardness in the range of 10-20, such is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known in the molding art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed material in the process of Robson in order to produce a high quality doll. In regard to using a styrene elastomer for the first resin, such is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to

the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known in the molding art for its strength. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use styrene for the first resin in order to produce a durable doll.

10. Applicant's arguments filed 2/26/03 have been fully considered but they are not persuasive. Applicant argues that the materials of Robson are not compatible for welding. This argument is confusing because Robson use polypropylene and a vinyl resin like the instant invention. Since the instant invention uses polypropylene and a vinyl resin to form a welded composite, the materials of Robson must also form a welded composite within the definition of the instant invention. In regard to Applicant's argument that Dahl uses a structure that is different from the both the instant invention and Robson, Applicant is reminded that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H LEE whose telephone number is 703.305.4019. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD CRISPINO can be reached on 703.308.3853. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.7718 for regular communications and 703.305.3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

EDMUND H LEE
Examiner
Art Unit 1732

EHL
May 19, 2003

5/19/03